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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,449	10/20/2003	Mark Beaumont	DB001078-000	3387

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EXAMINER	
NGO, CHUONG D	

ART UNIT	PAPER NUMBER
2193	

NOTIFICATION DATE	DELIVERY MODE
07/10/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Office Action Summary	Application No.	Applicant(s)	
	10/689,449	BEAUMONT, MARK	
	Examiner	Art Unit	
	Chuong D. Ngo	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 31-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 31-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/07/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-13 and 31-41 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,3-13 and 31-37 of copending Application No. 10/689,256. Although the conflicting claims are not identical, they are not patentably distinct from each other because the are claiming a common the method of operating an n-dimensional array of processing elements for finding an extrema for a plurality of values stored in an n-dimensional array of processing elements by determining odd and event extrema.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-13 and 31-41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-13 and 31-41 are directed to an invention that merely performs calculations and manipulations of data. In order for a claimed invention that merely performs calculations and manipulations of data to be statutory, the claimed invention must accomplish a practical application, and is not directed to a preemption of a calculation and/or manipulation data . That is the claimed invention must transform an article or physical object to a different state or thing, or produce a useful, concrete and tangible result and not cover every substantial practical application . See State Street 47 USPQ2d; Benson 175 USPQ , and "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", OG Notices: 22 November 2005. It is clear from claims 1-13 and 31-41 that the claimed invention merely involves calculations and manipulations of data among the processors to compute an extrema for a plurality of values . The claimed invention does transform an article or physical object to a different state or thing. The inputs are numbers and the output is also a number. The extrema produce by the claimed invention is not a real world result but merely a numerical value without a practical application recited in the claims that makes the result useful, concrete and tangible.

Therefore, Claim 1-13 and 31-41 are directed to non-statutory subject matter as the invention as claimed fails to accomplish a practical application. Further, the recitation in the claims that "a burst length is selected to optimize use of each processing element's ALU" does not constitute a practical application for the invention to produce useful, concrete and tangible result, and thus fails to render the claimed invention statutory. In addition, since the claims fails to limit the invention to any practical application, they appear to cover every substantial practical application, and thus also directed to a preemption of the claimed manipulations and calculations of data.

5. Applicant's arguments filed on 03/07/2008 have been fully considered but they are not persuasive.

Regarding the rejection under 35 USC 101, it is respectfully submitted that the claims are clearly directed calculations and manipulations of data which is required to accomplish a practical application and not to preempt of a calculation and/or manipulation data . That is the claimed invention must transform an article or physical object to a different state or thing, or produce a useful, concrete and tangible result, and not cover every substantial practical application. However, none of the requirements is met by the claimed invention. Therefore, the claims are clearly directed to non-statutory subject matter. The recitation in the claims that "a burst length is selected to optimize use of each processing element's ALU" does not constitute a practical application for the invention to produce useful, concrete and tangible result, and thus fail to render the claimed invention statutory. It is noted that the phrase "is selected to optimize use of ..." can be added to any claims without changing the scopes of claimed invention, and it is

clearly not true that a non-statutory invention can become statutory by adding this phrase into the claim. It should be noted that in re Alappat, claim 15 clearly recite a practical application for the computation, that is "for converting vector list data representing sample magnitudes of an input waveform into anti-aliased pixel illumination intensity data to be displayed on a display means", to produce useful, concrete and tangible result, that is "anti-aliased pixel illumination intensity data to be displayed on a display means" which is a smooth waveform. The present invention, on the other hand, produce a result that is a mere number indicating the extrema of a set of numbers. Since the claims fails to recite any practical application for the invention, the result clearly does not have any real world value and thus is not useful, concrete and tangible. In addition, because the claims fails to limit the invention to any practical application, they appear to cover every substantial practical application, and thus also directed to a preemption of the claimed manipulations and calculations of data. Noting that in Benson the claimed invention is performed by a computer with at least a shift register but is non statutory because it fails to limit the invention to a practical application to produce a useful, concrete and tangible result, and is directed to preemption as the invention covers every substantial practical application.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis, Jr. A. Bullock can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuong D Ngo/
Primary Examiner, Art Unit 2193

07/03/2008